

10-26-12

4 MAIN CONCEPTS IN ALGEBRA

- ① Goal: To get the variable alone
 - ② Whatever you do to one side, do the same to the other side (to keep the balance)
 - ③ Use inverse operations
 - ④ Always choose the # w/ the variable
- Equation (= sign)

Ex: $\frac{x+5}{-5} = 7 \leftarrow \text{Equation Balanced}$
 $\Delta \frac{-5}{2}$

$$x = 2$$

Ex:
$$\begin{array}{r} 5.12 \\ -5.12 \\ \hline 0 \end{array} + y = 10.003$$

$y = 4.883$
 Ex: $12\frac{1}{4} = m + 6\frac{7}{8}$
 $m + 6\frac{7}{8} = 12\frac{1}{4} = 12\frac{2}{8} + \frac{8}{8} = \frac{10}{8}$
 $\begin{array}{r} m + 6\frac{7}{8} = 12\frac{1}{4} \\ - 6\frac{7}{8} \end{array} \quad \begin{array}{r} 12\frac{2}{8} + \frac{8}{8} = \frac{10}{8} \\ - 6\frac{7}{8} = 6\frac{7}{8} \\ \hline 5\frac{3}{8} \end{array}$
 $m = 5\frac{3}{8}$